
Overview of the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) Program

Clean Water Program Development

- ◆ 1899 Rivers and Harbors Act
- ◆ 1948 Federal Water Pollution Control Act (FWPCA)
- ◆ 1965 Water Quality Act
- ◆ 1970 Executive Order - EPA established
- ◆ 1970 Refuse Act Permit Program
- ◆ 1972 FWPCA Amendments
- ◆ 1977 Clean Water Act (CWA)
- ◆ 1987 Water Quality Act

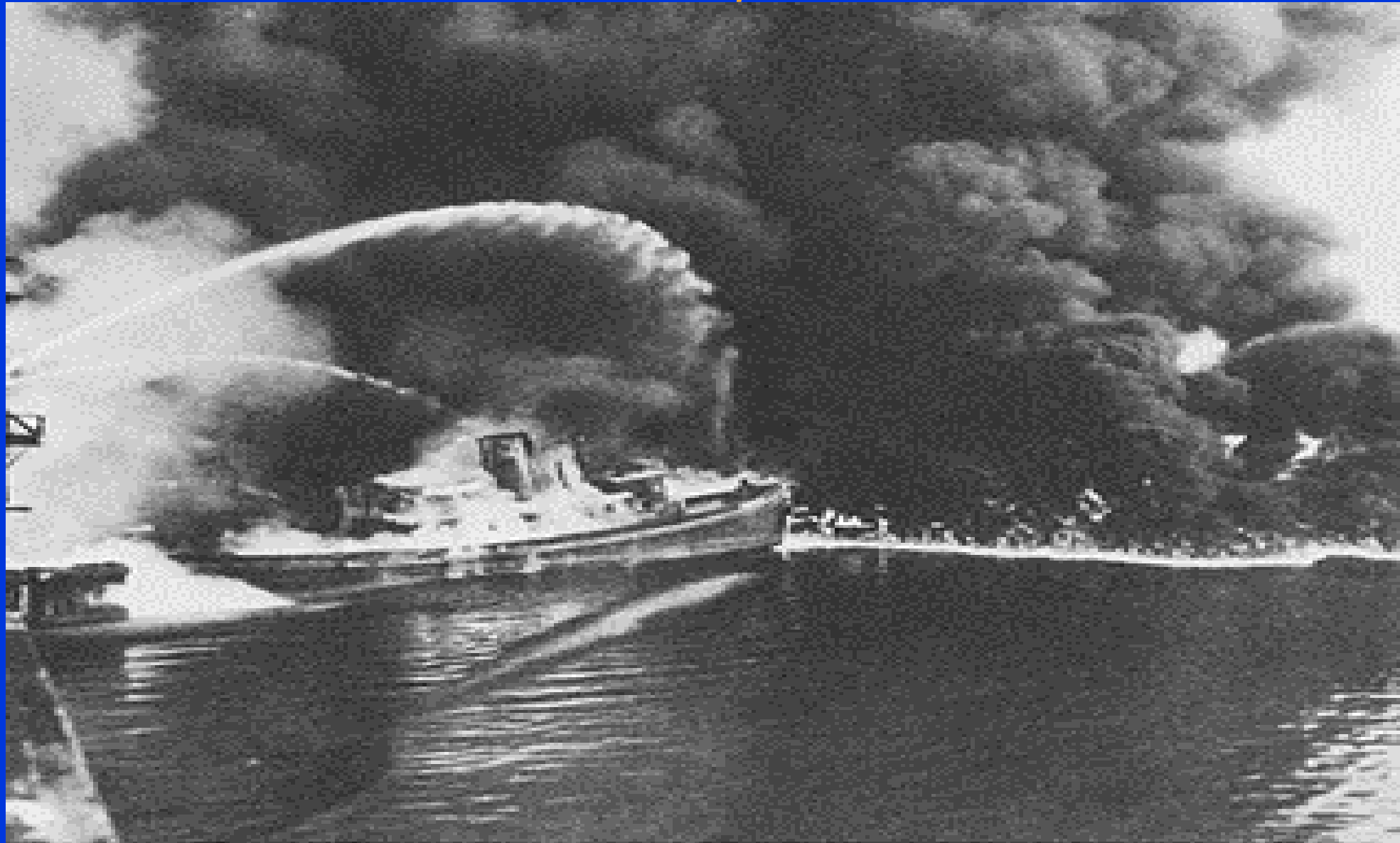


Water Quality Act of 1965

- ◆ Required standards for interstate waters
- ◆ Enforcement hampered by
 - Burden of proof with enforcing agency
 - Lack of standards
 - No criminal or civil penalties

Cuyahoga River – Cleveland, Ohio

June 22, 1969



Federal Water Pollution Control Act Amendments - 1972

Section 101(a)

- ◆ **Objective:** Restore and maintain the chemical, physical, and biological integrity of the nation's waters
- ◆ **National Goals**
 - Eliminate the discharge of pollutants by 1985
 - Achieve by July 1, 1983, as an interim goal, a level of water quality that provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water

Federal Water Pollution Control Act Amendments - 1972 (Continued)

- ◆ Established NPDES, pretreatment, and construction grants programs
- ◆ Established compliance dates
- ◆ Provided for authorization of State NPDES permitting programs
- ◆ Indicated that permit compliance is a shield
- ◆ Established significant penalties for permit violations

Natural Resources Defense Council Consent Decree - 1976

- ◆ Required a list of toxic priority pollutants
- ◆ Required a list of primary industries for technology-based controls

Clean Water Act - 1977

- ◆ **Section 307(a) adopted provisions of NRDC Consent Decree**
- ◆ **Clarified that Federal facilities are subject to State programs**
- ◆ **Pretreatment program delegation**
 - **Authorized EPA to approve local pretreatment program**
 - **Required NPDES States to modify programs to include pretreatment oversight**

Water Quality Act - 1987

- ◆ Specifies storm water permitting requirements
- ◆ Designates that Indian tribes be considered “States”
- ◆ Creates Federal sludge management program
- ◆ Increases penalties for noncompliance
- ◆ Renews emphasis of surface water toxics control

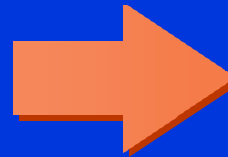
What is a Permit?

- ◆ It is a license . . .
 - Issued by the government to persons conducting business in the United States
 - Granting permission to do something which would be illegal in the absence of the permit
- ◆ There is no right to a permit and it is revocable for cause (noncompliance)
- ◆ For our purposes, NPDES permit is license to discharge



NPDES Statutory Framework

- ◆ All “point” sources
- ◆ “Discharging pollutants”
- ◆ Into “waters of the U.S.”



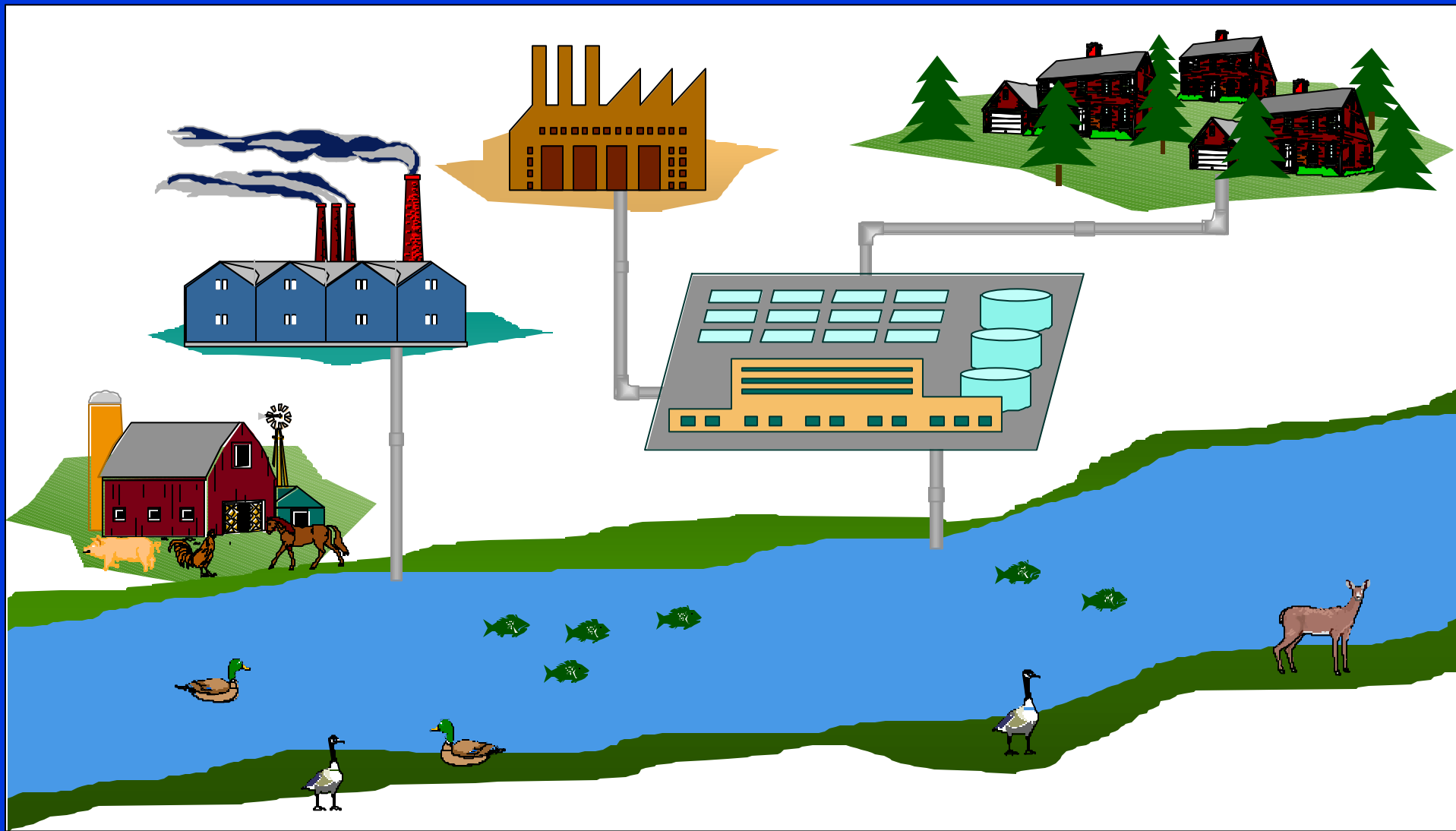
Must obtain an NPDES permit from EPA or an approved State

Point Source - 40 CFR 122.2

- ◆ Any discernible, confined, and discrete conveyance, including but not limited to:
 - Any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.
 - Does not include return flows from irrigated agriculture or agricultural storm water runoff



NPDES Permit Program



Pollutant – 40 CFR 122.2

- ◆ Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.
 - Does not include sewage from vessels or injected wastes

CWA Classes of Pollutants

- ◆ **Conventional pollutants**
 - BOD, TSS, Oil and Grease, Fecal Coliform bacteria, and pH
- ◆ **Toxic pollutants**
 - 126 “Priority Pollutants”
 - Heavy metals (e.g., Cu, Pb, Hg)
 - Organics compounds (e.g., PCBs, dioxin)
- ◆ **Non-Conventional**
 - Everything else....
 - e.g., Chlorine, ammonia, nitrogen, phosphorus



Waters of the United States

40 CFR §122.2


- ◆ **Regulatory definition would cover virtually all types of surface waters including:**
 - **Rivers and streams**
 - **Lakes and ponds**
 - **Wetlands**
 - **Sloughs**
 - **Prairie potholes**
 - **Intermittent streams**
 - **Territorial seas**
 - **Etc.**

Waters of the US (continued)

- ◆ **SWANCC v. US Army COE (January 9, 2001)**
 - **What's in?**
 - Navigable waters
 - Interstate waters
 - Waters adjacent to or part of the tributary system of navigable waters (part of the same aquatic system)
 - Waters used or that could be used for interstate commerce*
 - **What's out?***
 - Isolated, intrastate waters that could affect interstate commerce solely by virtue of their use as migratory bird habitat
 - **States may have more inclusive definition**

Waters of the US (continued)

- ◆ **What about groundwater?**
 - May be if a direct hydrological connection
 - If not waters of the US, may be “waters of the State”
- ◆ **What about treatment ponds or lagoons?**



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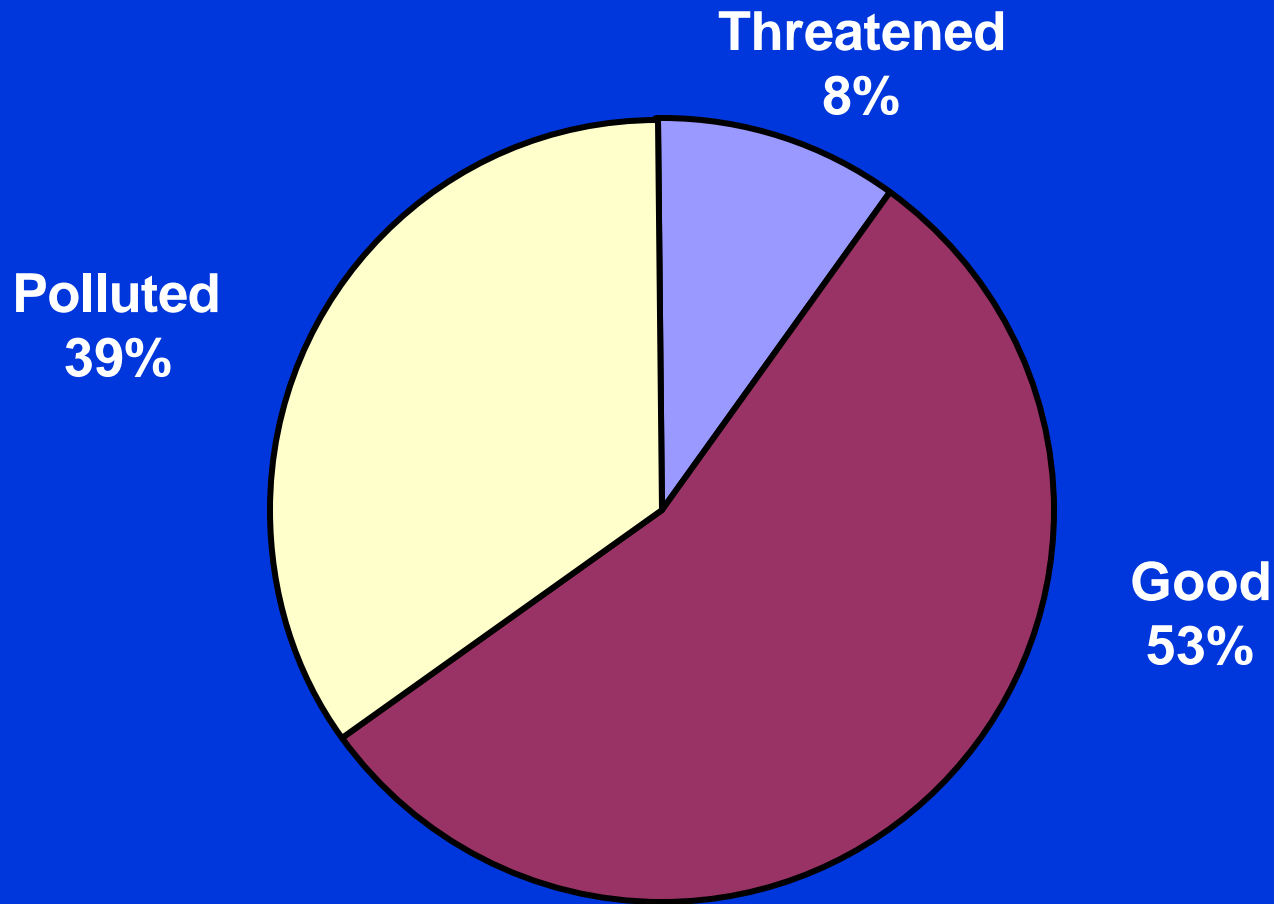
CUYAHOGA
RIVER

NPDES Investments and Accomplishments

Since 1972:

- ◆ **\$77 Billion - POTW Construction**
- ◆ **45% reduction in effluent BOD while POTW loadings increased by 35%**
- ◆ **Water bodies meeting standards increased from 37% to 53%**

Rivers and Streams*



* 699,946 of 3.7 million miles assessed.

Source: 2000 State 305(b) reports

